



Inspection, Measuring, Testing & Marking

Innovative tube measuring with leading software module

The most advanced innovations are often in greater demand during difficult circumstances like the current global economic crisis. TeZetCAD is a market leading software module for easy tube measurement that aims to increase accuracy and efficiency in tube production.

Tubes are rarely correct when they leave the bender, as a tube cylinder is not always straight or round. It may be that the straight has a minimal bend or that the bend has a near ovality while being formed in the bender.

There is also the possibility that after deformation in the bender, the radius does not conform to the predefined radius of the tooling. In this case, both before and after the bend, the cylinder lengths differ to some extent, which can cause complicated discussions with a quality control department that cannot accept abnormal lengths.

It should be possible to prove if a tube has been deformed into ovality. It is also necessary to prove if the circularity of the tube is continuous. However, the method of tactile measurement of the bend or the roundness/circularity is even more important when dealing with issues of handling.

In measuring such values, the most valuable criteria are the collected measuring points. If the measuring points are collected at different points on the tube, the deviation can be predicted more easily. If the deviation is within the

allowed tolerance the basic principle of comparison fits together.

Another challenge is that the bent radius does not fit the nominal value. It is vital to follow a set of rules to show fitting accuracy of the delivered part. It is also important to show the fitting accuracy of centre-points in flange holes in a graphical comparison.

TeZetCAD has a range of features that provide comprehensive tube measurement. The visual display of the documentation of a bent radius is completely unremarkable, as a deviation is shown in the bend but the deviation consequences crop up 'only' in the lengths before and after this bend.

The measurement of a supposed ovality in a bend can look easy, but the task is often difficult. For this feature the user is guided pinpoint to the calculated measuring point before the bend. The program finds the points automatically which are in ovality (ie where the tube has no more circularity) and leads the user with the measuring probe to these points.

TeZet Technik AG – Switzerland
Fax: +41 56 2492878
Email: tezet_leistritz@compuserve.com
Website: www.tezet.com

TeZetCAD tube measuring software reveals problems with bent tube

